UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 24 2013

REPLY TO THE ATTENTION OF:

WW-16J

U.S. Army Corps of Engineers, Louisville District
ATTN: Sam Werner, CELRL-OP-FW
P.O. Box 489
Newburgh, Indiana 47629-2678

Re: Vigo Sunna, LLC-Vigo Sunna Mine, LRL-2011-1055-sew

Dear Mr. Werner:

The U. S. Environmental Protection Agency has reviewed the subject public notice and associated application materials for the proposed Vigo Sunna Mine (Vigo mine) near the town of Stendal, Pike County, Indiana. Vigo Sunna, LLC (Vigo) proposes to conduct surface mining on a 1498-acre site. Approximately 98,058 linear feet (lft) of streams (31,452 lft intermittent and 66,066 lft ephemeral) and 7.001 acres of wetlands (1.588 acres palustrine forested, 0.816 acre palustrine scrub-shrub, and 4.597 acres palustrine emergent) would be impacted by the project. A total of 524 acres within the project boundaries have been impacted by previous mining, most of which occurred prior to the issuance of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). We offer the following comments based on our review.

Direct Impacts

The "Impacts Summary" table included in the permit package should identify the type of impact to each stream segment and wetland (e.g. mine-through, spoil stockpiles, sediment pond construction). This information, in conjunction with the "Streams and Wetlands" maps provided and "General Mine Operations" figure and discussion would facilitate a comprehensive review of the direct impacts.

Cumulative Impacts Analysis (CIA)

The CIA states that no active mining has occurred in Pike County since the year 2000. On the contrary, active mining is occurring in Pike County. For example, the Augusta Mine (S-350), Cardinal Mine (S-365), Hilsmeyer #2 Mine (S-367), Rough Creek Mine (S-368), Log Creek Mine (S-032), and the Charger Mine (S-333) are currently active, ongoing operations in Pike County.[1] Furthermore, a proposed surface mine, Rhodemaker Mine (S-359), is located just south

[1] http://www.in.gov/dnr/reclamation/5397.htm

of the Vigo mine. The applicant needs to revise the CIA to remove incorrect information and account for potential aquatic resource impacts of other proposed and active mines within the "Review Area."

Avoidance and Minimization

As you know, the 404 (b)(1) Guidelines (Guidelines) require that the applicant demonstrate there are no practicable alternatives available that would have a less adverse impact on the aquatic environment for non-water dependant activities. The Guidelines presume that less damaging upland alternatives are available for these activities unless demonstrated otherwise by the applicant. [2] The applicant must follow a sequence of steps to be in compliance with the Guidelines; these include avoidance, minimization, and compensation for unavoidable impacts. EPA recognizes that Vigo has avoided impacts to 40,888 lft of streams and 3.048 acres of wetland within the site boundaries; however, we believe that there may be opportunities to further avoid high quality resources. For example, Vigo should consider further avoidance of forested areas and tributaries along Stendal Road and the East Study Boundary, as depicted in *Exhibit 5 (Sheet 3)* of the application.

Mitigation

Vigo proposes to mitigate for impacts to 7.001 acres of wetland by re-establishing 11.3 acres of forested wetlands. In addition, Vigo plans to mitigate for impacts to 98,058 lft of stream (31,542 lft intermittent and 66,606 lft ephemeral) by re-establishing 48,201 lft of intermittent streams and 33,668 lft of ephemeral streams. Additional intermittent streams would be created in valley bottoms where open pits from previous mining are located, providing connectivity between upstream and downstream resources. According to the U.S. Army Corps of Engineers (Corps) staff, it is likely that many, if not all, of the pits have groundwater input to some degree which increases the potential for successful stream mitigation. The streams would all be constructed using natural channel design and have forested corridors.

Monitoring

As a part of the monitoring program for affected and reconstructed streams, biological monitoring should be required to ensure there is no degradation to the communities that inhabit the streams. Biological monitoring, along with water chemistry and physical assessments, should occur prior to the initiation of mining activities to establish baseline conditions, during the mining activities to assist in determining potential impacts to aquatic habitat and water quality downstream of the impacts, and should continue at least five years after the completion of stream restoration and site reclamation activities at the mine site where appropriate to determine mitigation success. This is important for evaluating the cumulative impacts of mining in the project area, the success of stream reconstruction and mitigation, and determining if the project is meeting ecological performance standards.

Adaptive Management Plan

[2] 40 C.F.R. § 230.10(a)(3)

Because there are many unknowns and uncertainties regarding how the project will affect the environment, the applicant must develop a more detailed Adaptive Management Plan (AMP) per the 2008 Compensatory Mitigation Rule (mitigation rule). EPA acknowledges that there are sections in the mitigation plans for both streams and wetlands that generally describe adaptive management; however, the plans should be more detailed and include a description of actions to be initiated when the Corps determines the mitigation is not developing as it should or not on track to meet the established performance standards. The AMP should include action triggers that will indicate when the AMP is to be activated and specific actions and timelines for adaptive actions which would be implemented by Vigo following the approval of the Corps (ex. revisions to grading and revegetation plans for reclaimed sites, modification of stormwater plans, providing supplemental mitigation, and other Best Management Practices).

Financial Assurances

Financial assurances must be addressed in a Section 404 context to achieve compliance with the mitigation rule. According to SMCRA regulations, bond release occurs in phases. Much of the SMCRA bond release occurs when final grading of the area is complete, and topsoil and subsoil have been replaced and stabilized. The bond release is not contingent upon the stream and wetland mitigation meeting performance criteria under Section 404 of the Clean Water Act at any phase. The proposed bonding does not provide a high level of confidence that the compensatory mitigation project will be successfully completed in accordance with the applicable performance standards with sufficient financial assurances in place.[3] The applicant should demonstrate how the financial assurances provided per SMCRA are sufficient to cover Section 404 mitigation if an assurance is not provided specifically for that purpose.

Long-Term Protection

The current proposal states that all wetland mitigation sites will be protected by deed restrictions or conservation easements in perpetuity, to be executed after completion of the mitigation construction. The deed restrictions or conservation easements for wetland mitigation areas will be recorded within 60 days after mitigation construction is complete.

For streams, the applicant states that long-term management will be in the form of compliance with the laws set forth in Section 404 of the Clean Water Act. The application states that landowners have been advised of current laws protecting Waters of the United States and mitigation areas as they exist on their land. Landowners will be presented with this information and a copy of the mitigation map. The applicant needs to consider that long-term management requires more than informing property owners about applicable laws and providing maps. In order to receive full mitigation credit for proposed stream and wetland mitigation, a long-term management plan needs to be in place and the mitigation areas should be protected by a conservation easement, environmental covenant, deed restriction, or other site protection instrument, as required by the mitigation rule. Long term management and protection of stream mitigation areas is essential to ensure the long-term sustainability of the site.

[3] 40 CFR § 230.93 (n)(1)

In conclusion, EPA objects to the project as proposed because it does not comply with the Section 404(b)(1) Guidelines. Thank you for the opportunity to provide comments on this project. Please keep EPA apprised of any response to these comments. If you have any questions, or if we can be of further assistance, please contact Melissa Blankenship at 312-886-6833 or 503-326-5020.

Sincerely,

Peter Swenson, Chief
Watersheds and Wetlands Branch

cc: David Carr, IDEM
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